



OFFICE MEMORANDUM

DATE: September 14, 2006

FILE: 35-1-M9

TO: Region Engineers
Region Delivery Engineers
Region Development Engineers
TSC Development Engineers
TSC Managers
Resident/Project Engineers
Region Construction Engineers
Region Traffic and Safety Engineers
TSC Traffic and Safety Engineers
Region Maintenance Engineers

FROM: Larry E. Tibbits
Chief Operations Officer

John C. Friend
Engineer of Delivery

SUBJECT: Bureau of Highway Instructional Memorandum 2006-12
Sign Reflective Sheeting Material

For FY 2007, the department is revising the sign sheeting material requirements on its freeway and non-freeway corridor sign improvement projects. This revision will allow the use of American Society for Testing and Materials (ASTM) Type IV sign sheeting in place of Type III. Attached is the notice to sign contractors, including a list of projects being impacted and approved sign sheeting materials.

It is our intent to make these changes to all department signing in FY 2008. However, if a contractor wishes to substitute a higher grade sheeting than called for in a FY 2007 contract, please accept the change as long as it is at no additional cost to the department and the sign sheeting material is on the Qualified Products List (QPL.) To verify if a product is on the QPL, go to:

http://www.michigan.gov/documents/MDOT-Material_Source_Guide_Qualified_Products_84764_7.pdf and look under 919.02B1.

If you have any questions, please contact Mark Bott, Traffic Operations Manager, at 517-335-2625.

Chief Operations Officer

Engineer of Delivery

Attachments

Subject Index: Traffic Control

BOH-DEL:T&S:MWB:nw

cc: C & T Support Area Staff
J. Polasek
M. DeLong
M. Van Port Fleet
J. Reincke
J. Culp
B. O'Brien
P. Collins
C. Rademacher
P. Sebenick
G. Moore
K. Reincke
T. Fudaly, FHWA
ACEC
APAM
CRAM
MAA
MCA
MCPA
MITA



STATE OF MICHIGAN

DEPARTMENT OF TRANSPORTATION
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

August 18, 2006

File: 35-1-M9

««AddressBlock»»

««GreetingLine»»

For FY 2007 the Michigan Department of Transportation will be revising the sign sheeting requirements on its freeway and non-freeway corridor sign improvement projects. A list of upcoming projects impacted by this revision is enclosed for your information. Signs included in road and bridge projects are not part of the revision.

The revision is the use of ASTM Type IV signing sheeting in place of Type III. This revision will impact regulatory and guide signs. For freeway guide signs the sign sheeting requirements will be ASTM Type IX legends and borders on a Type IV background. For non-freeway guide signs all the retroreflective sheeting materials will be Type IV. All school and warning signs will continue to be Type IX. Enclosed are the Special Provisions and Frequently Used Special Provisions (03SP919A and 03SP919C) that will be incorporated into the subject signing projects. Please note, not all four provisions may be in every project listed due to what signs are being replaced, i.e., the School Sign Frequently Used Special Provision would not be in a freeway signing project. The sheeting materials to be used must be on the Qualified Products List (QPL). Until the QPL has been revised this letter will serve as official notice of sign sheeting materials that can be used. These materials are as follows:

ASTM Type IV

Avery Dennison T-6500 Series
3M 3930 Series

ASTM Type IX

Avery Dennison T-9500 Series
3M Series 3990

If you have any questions, please contact Alonso Uzcategui, Traffic Signing Engineer at 517-335-2624.

Sincerely,

Mark W. Bott
Traffic Operations Manager
Traffic and Safety Support Area

Enclosure(s)

Address List for August 18, 2006 Letter

| Title | First Name | Last Name | Company Name | Address Line 1 | Address Line 2 | City | State | ZIP Code |
|-------|------------|-----------|---|------------------------------------|--|---------------|----------|------------|
| Mr. | Scott | Chapman | Reflective Products Division | Avery Dennison | 287 Blue Jacket Circle | Pickerington | Ohio | 43147 |
| Mr. | Robert M. | Somers | Government Transportation Safety Specialist | 3M Traffic Safety Systems Division | Four Westbrook Corporate Center, Suite 300 | Westchester | Illinois | 60154-5707 |
| | | | Action Traffic Maintenance, Inc. | 5182 South Saginaw | | Flint | Michigan | 48507 |
| | | | Cable Constructors, Inc. | P.O. Box 190 | | Iron Mountain | Michigan | 49801 |
| | | | Give 'em A Brake Safety | 2610 Sanford Avenue | | Grandville | Michigan | 49418 |
| | | | Highway Service Company, Inc. | 26401 Hall Road | | Woodhaven | Michigan | 48183 |
| | | | J & J Contracting, Inc. | 980 W. Buchannan Road | | Ithaca | Michigan | 48847 |
| | | | JCS, Inc. * | P.O. Box 145 | | Wakefield | Michigan | 49968 |
| | | | Michigan Barricading Equipment, Inc. | 32800 West Eight Mile Road | | Farmington | Michigan | 48336 |
| | | | Midwest Bridge Company | P.O. Box 40 | | Williamston | Michigan | 48895 |
| | | | NES Traffic Safety Limited Partnership | 2522 Burlingame Avenue, SW | | Wyoming | Michigan | 49509-2238 |
| | | | Nationwide Fence & Supply Company | 53861 Gratiot | | Chesterfield | Michigan | 48051 |
| | | | Pine Ridge Construction, Inc. | 529 Fitchburg Road | | Stockbridge | Michigan | 49285 |
| | | | Rathco Safety Supply, Inc. | 6742 Lovers Lane | | Portage | Michigan | 49002 |
| | | | Snowden, Inc. | P.O. Box 439 | | Escanaba | Michigan | 49829 |
| | | | Trans Tech Electric Limited Partnership | 4601 Cleveland Road | | South Bend | Indiana | 46628 |
| | | | Walter Toebe Construction Company | P.O. Box 930129 | | Wixom | Michigan | 48393-0129 |
| | | | Sterling Sign Company, Inc. | 4079 Bonnyview Drive | | Lansing | Michigan | 48911 |
| | | | State Barricades, Inc. | 24097 Schroenherr Road | | Warren | Michigan | 48089 |
| | | | Windemuller Electric, Inc. | P.O. Box 466 | | Wayland | Michigan | 48938-0466 |
| | | | Rauhorn Electric, Inc. | 17171 23 Mile Road | | Macomb | Michigan | 48042-4100 |

* The letter to JCS, Inc. was returned and the Contracts Administration did not have a new address for this company nor did an Internet search yield results.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RETROREFLECTIVE SHEETING FOR YELLOW WARNING SIGNS

T&S:MWB

1 of 1

C&T:APPR:JKG:BRZ:03-29-05

FHWA:APPR:07-29-05

a. Description. This Special Provision identifies the retroreflective sheeting material to be used on permanent Yellow Warning (W series, OM-1, OM-2, OM-3, and D3-2a) signs installed on this project.

b. Materials. All Yellow Warning (W series, OM-1, OM-2, OM-3, and D3-2a) signs used on this project shall be Fluorescent Yellow. The Fluorescent Yellow sheeting shall meet ASTM D 4956 specifications for Type IX retroreflective sheeting.

c. General Requirements. The Contractor shall provide the Engineer with a written certification that the reflective sheeting on the furnished signs meets the following requirements:

1. Sheeting materials used on each sign are approved products obtained from the same sheeting manufacturer and applied according to the manufacturer's recommendations.
2. All signs were manufactured in strict compliance with the sheeting manufacturer's requirements.
3. The certification shall also include all lot numbers, run numbers, shipping date, invoice number, stock number, and quantities of all materials used for each sign shipment.

d. Measurement and Payment. The completed work as described will be paid for in accordance with subsection 810.04 of the Standard Specifications for Construction.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS

T&S:MWB

1 of 1

C&T:APPR:JKG:BRZ:03-29-05

FHWA:APPR:07-29-05

a. Description. This Special Provision identifies the retroreflective sheeting material to be used on School (S1-1, S2-1, and S4-3) signs installed on this project.

b. Materials. All School signs used on this project shall be Fluorescent Yellow Green. The Fluorescent Yellow Green sheeting shall meet ASTM D 4956 specifications for Type IX retroreflective sheeting.

c. General Requirements. The Contractor shall provide the Engineer with written certification that the reflective sheeting on the furnished signs meets the following requirements:

1. Sheeting materials used on each sign are approved products obtained from the same sheeting manufacturer and applied according to the manufacturer's recommendations.
2. All signs were manufactured in strict compliance with the sheeting manufacturer's requirements.
3. The certification shall also include all lot numbers, run numbers, shipping date, invoice number, stock number, and quantities of all materials used for each sign shipment.

d. Measurement and Payment. The completed work as described will be paid for in accordance with subsection 810.04 of the Standard Specifications for Construction.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RETROREFLECTIVE SHEETING FOR PERMANENT TRAFFIC SIGNS

T&S:MWB

1 of 1

C&T:APPR:MSB:JKG:07-24-06

a. Description.

Delete the second sentence of subsection 919.02.B.1, on page 839 of the Standard Specifications for Construction in its entirety and replace with the following:

Sheeting must meet ASTM D 4956 specifications for Type IV retroreflective sheeting unless specified otherwise by another special provision in the contract.

b. General Requirements. The Contractor shall provide the Engineer with a written certification that the reflective sheeting on the furnished signs meets the following requirements:

1. Sheeting materials used on each sign are approved products obtained from the same sheeting manufacturer and applied according to the manufacturer's recommendations.
2. All signs were manufactured in strict compliance with the sheeting manufacturer's requirements.
3. The certification shall also include all lot numbers, run numbers, shipping date, invoice number, stock number, and quantities of all materials used for each sign shipment.

c. Measurement and Payment. The completed work as described will be paid for in accordance with subsection 810.04 of the Standard Specifications for Construction.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
RETROREFLECTIVE SHEETING FOR FREEWAY GUIDE SIGNS, MODIFIED

T&S:MWB

1 of 1

C&T:APPR:MSB:JKG:08-18-06

a. Description. This Special Provision identifies the reflective sheeting material to be used for Freeway Guide signs with Clearview font and the background of Exit Only sign series (E11-1) and Advisory Speed Plaques (E13-1 and E13-2) installed on this project.

b. Materials. All white legends, the white portion of route markers, shields, and auxiliaries, and the borders on blue, brown, and green Freeway Guide signs used on this project with Clearview font shall meet ASTM D 4956 specifications for Type IX retroreflective sheeting. The background for blue, brown, and green Freeway Guide signs shall meet ASTM D 4956 specifications for Type IV retroreflective sheeting.

The yellow background of the Exit Only sign series (E11-1) and Advisory Speed Plaques (E13-1 and E13-2) shall be fluorescent yellow. The fluorescent yellow sheeting shall meet ASTM D 4956 Type IX retroreflective sheeting specifications.

c. General Requirements. The Contractor shall provide the Engineer with a written certification that the reflective sheeting on the furnished signs meets the following requirements:

1. Sheeting materials used on each sign are approved products obtained from the same sheeting manufacturer and applied according to the manufacturer's recommendations.
2. All signs were manufactured in strict compliance with the sheeting manufacturer's requirements.
3. The certification shall also include all lot numbers, run numbers, shipping date, invoice number, stock number, and quantities of all materials used for each sign shipment.

d. Construction. All white legend placed on the same sign shall be placed according to the manufacturer's recommendations.

e. Measurement and Payment. The completed work as described will be paid for at the contract unit price for the following contract item (pay item):

| Contract Item (Pay Item) | Pay Unit |
|--|-----------------|
| Retroreflective sheeting for Freeway Guide Signs, Modified | Square Foot |

| FY 2007 MDOT Freeway and Non-Freeway Signing Program | | | | | |
|--|---|--------|-------------------------------------|------------|-------------------|
| Route | Location | Length | Work Type | Region | County |
| I-75 | I-75, Bay Region | 73059 | Freeway Signing | Bay | Bay County |
| US-2 | US-2 from M-94 to Menominee/Dickinson County Line | 85056 | Non-Freeway Signing | Superior | Delta County |
| US-127 | US-127, Hillsdale County | 33.98 | Non-Freeway Signing | University | Hillsdale County |
| M-21 | M-21, Ionia County | 26.06 | Non-Freeway Signing | Grand | Ionia County |
| US-2 | US-2, Dickinson and Iron Counties | 68.75 | Non-Freeway Signing | Superior | Iron County |
| US-127 | US-127, Jackson County | 17.63 | Freeway Signing | University | Jackson County |
| M-21 | M-21, Kent County | 16.70 | Non-Freeway Signing | Grand | Kent County |
| M-44 | M-44, Kent County | 4.19 | Non-Freeway Signing | Grand | Kent County |
| US-23 | US-23, University Region | 82.06 | Freeway Signing | University | Livingston County |
| M-1 | M-1, Oakland County | 9.37 | Non-Freeway Signing | Metro | Oakland County |
| Regionwide | Macomb and St. Clair Counties | 0.49 | Overhead Sign Structure Replacement | Metro | Region Wide |
| Statewide | Statewide | | Freeway Truck & Min Speed Signs | Statewide | State Wide |
| M-10 | Greenfield to Livernois | 4.26 | Freeway Signing | Metro | Wayne County |
| M-10 | Livernois to M-8 (Davison Freeway) | 1.75 | Freeway Signing | Metro | Wayne County |
| M-10 | M-8 (Davison Freeway) to Jefferson Avenue | 5.87 | Freeway Signing | Metro | Wayne County |
| I-94 | Wayne County | 1.92 | Overhead Sign Structure Replacement | Metro | Wayne County |